comprising a fixed catalyst bed [of catalytic material contained in said reactor said fixed bed of catalytic material] having a top and a bottom layer, [and] wherein during [operating] operation of said fixed bed reactor[,] a feedstock flow passes through said fixed catalyst bed [there is] and a pressure drop across said top layer of said fixed catalyst bed [of catalytic material and wherein the pressure drop across said top layer of said fixed bed of catalytic material] increases during reaction of said feedstock due to fouling of said top layer of said fixed catalyst bed [of catalytic material], the method comprising:

(a) placing a bypass apparatus within said fixed catalyst bed in substantial alignment with [the] said feedstock flow [of said feedstock,] through said fixed catalyst bed said bypass apparatus comprising,

a cage member comprising a first elongated hollow member having a top wall, side walls and a bottom wall, said cage member having openings therein, and

a second hollow elongated member for bypassing an increasing amount of said feedstock through said second hollow elongated member into said cage member as said top layer of said fixed bed fouls to create a bypass flow, said second hollow elongated member being disposed within said cage member and protruding through said top wall of said cage member and wherein said second hollow elongated member extends above said fixed catalyst bed through said cage member, said second hollow elongated member being sized to regulate [the flow of said feedstock into said cage] said bypass flow, said cage member having a substantially larger cross-section than said second hollow elongated member to effectively reduce the [exit] velocity of [the] said bypass flow as it exits from said cage member into said bottom [cage] layer of said fixed catalyst bed,

(b) introducing said feedstock into said fixed bed of catalytic material, wherein a majority of said feedstock will flow through said top layer of said fixed bed of catalytic material, and

(c) as said top layer of said fixed bed of catalytic material fouls, bypassing [an] said increasing amount of said feedstock to said bottom layer of said fixed bed of catalytic material[.];

wherein said second hollow elongated member is continuously open to said bypass flow.

10. (amended) The method of claim 9, wherein said hydrocarbon feed is selected from the group consisting of liquid feed, vapor feed, and mixtures thereof.

11. (amended) The method of claim 9, wherein said feedstock is selected from the group consisting of hydrocarbon feedstocks, chemical feedstocks, and mixtures thereof.

12. (twice amended) A method for extending an operating life of a fixed catalyst bed reactor, the method comprising:

providing a reactor comprising at least one fixed catalyst bed;

establishing a feedstock flow through said at least one fixed catalyst bed partitioning [the] said at least one fixed catalyst bed into a top layer and a bottom layer by placing a bypass apparatus within said at least one fixed catalyst bed in substantial alignment with [the] said flow of said feedstock, said bypass apparatus comprising,

a cage member comprising a first elongated hollow member having a top wall, side walls and a bottom wall, said cage member having openings therein, and

a second hollow elongated member for bypassing an increasing amount of said feedstock through said second hollow elongated member into said cage member as said top layer of said fixed bed fouls to create a bypass flow, said second hollow elongated member being disposed within said cage member and protruding through said top wall of said cage member and wherein said second hollow elongated member extends above said at least one fixed catalyst bed through said cage member, said second hollow elongated member being sized to regulate [the] said bypass flow of said feedstock into said cage, said cage having a substantially larger cross-section than said second hollow elongated member to effectively reduce the [exit] velocity of [the] said bypass

flow as it exits from said cage member into said bottom [cage] layer of said at least one fixed catalyst bed,

[introducing a feedstock into the fixed catalyst bed and as said top layer fouls,] bypassing [an] said increasing amount of [the] said feedstock flow through said bypass apparatus to the bottom unfouled layer, as said top layer fouls;

wherein said second hollow elongated member is continuously opened to said bypass flow.

14. (twice amended) The method of claim 12, wherein said second hollow elongated member is a tubular member having a diameter from about 0.25 to about 12 inches.

15. (twice amended) The method of claim 12, wherein said cage member is a tubular member having a diameter of about 3 to about 20 inches.

16. (twice amended) The method of claim 12, wherein said second hollow elongated member has a pressure drop of about 5 to about 50 times greater than that of said at least one fixed catalyst bed when said at least one fixed catalyst bed is a fresh catalyst bed.

17. (twice amended) The method of claim 12, wherein said bypass apparatus further [comprising] comprises a separation device disposed above said second hollow elongated member.

18. (twice amended) The method of claim 12, wherein said separation device is selected from the group consisting of caps, centrifugal separators and cyclones.

19. (twice amended) The method of claim 12, wherein said at least one fixed catalyst bed contains packing material for distributing particulates passing through said bypass apparatus.